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Abstract

An improved data telecommunications cable according to the invention includes a plurality of twisted pairs of insulated conductors, and a dielectric pair separator formed with a plurality of folds, to provide a plurality of grooves extending along a longitudinal length of the dielectric filler. Each twisted pair of insulated conductors is disposed within a groove of the dielectric pair separator. The data communications cable also includes a jacket assembly enclosing the plurality of twisted pairs of insulated conductors and the dielectric pair separator. The dielectric pair separator separates each twisted pair of insulated conductors from every other twisted pair of insulated conductors with a spacing sufficient to provide a desired crosstalk isolation between each of the plurality of twisted pairs of insulated conductors. With this arrangement, the data communications cable of the invention may be used in high speed data transmissions while maintaining a form factor that has desired flexibility and workability, and provides a cable that is compatible with industry standard hardware, such as plugs and jacks. The data communications cable of the invention also has the additional benefit of a reduced size.